

# Greenwashing

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# Individual Assignment #2

## - Green Bundle Strategy

- ▶ Assume you work for a company that is considering applying the Green Bundle Strategy. Pick any company and product you wish and write a detailed proposal (**2 pages**) to your superior outlining how you would implement the Bundle Communication Strategy. Describe how the company could use one of the five distinct paths to promote personal advantages while remaining sustainable, using benefits that often come naturally with environmental goods: quality, status, health, money, and emotion.
- ▶ Identify a product and why you choose to implement the green bundle communication strategy with this product. You could describe how the company is currently marketing this product and the problems that you see with the current marketing strategy. Provide figures from reports and document to substantiate your claim.
- ▶ Describe the target audience of the products that you have chosen.
- ▶ Identify **one of the five co-benefits** of the Green Bundle (Quality, Health, Status Emotion, Money), that you will use in your communication strategy and why you choose that benefit to be paired with this product.
- ▶ Describe how the company should convey the benefit that you have chosen, together with their sustainability message to their target audience. You could describe the medium that they should use (i.e. social media, print media, etc.) and how they should craft their message.
- ▶ Describe potential risks associated with your recommended strategy and how to mitigate them.
- ▶ Describe the expected outcome that the marketing strategy should yield (i.e. product yield, market penetration, etc.)
- ▶ Describe if any other co-benefits of the Green Bundle could complement the benefit you chose or if there are downsides of communicating concurrently about other benefits.

# Increased Interest in Greenwashing

BRAND CAMP

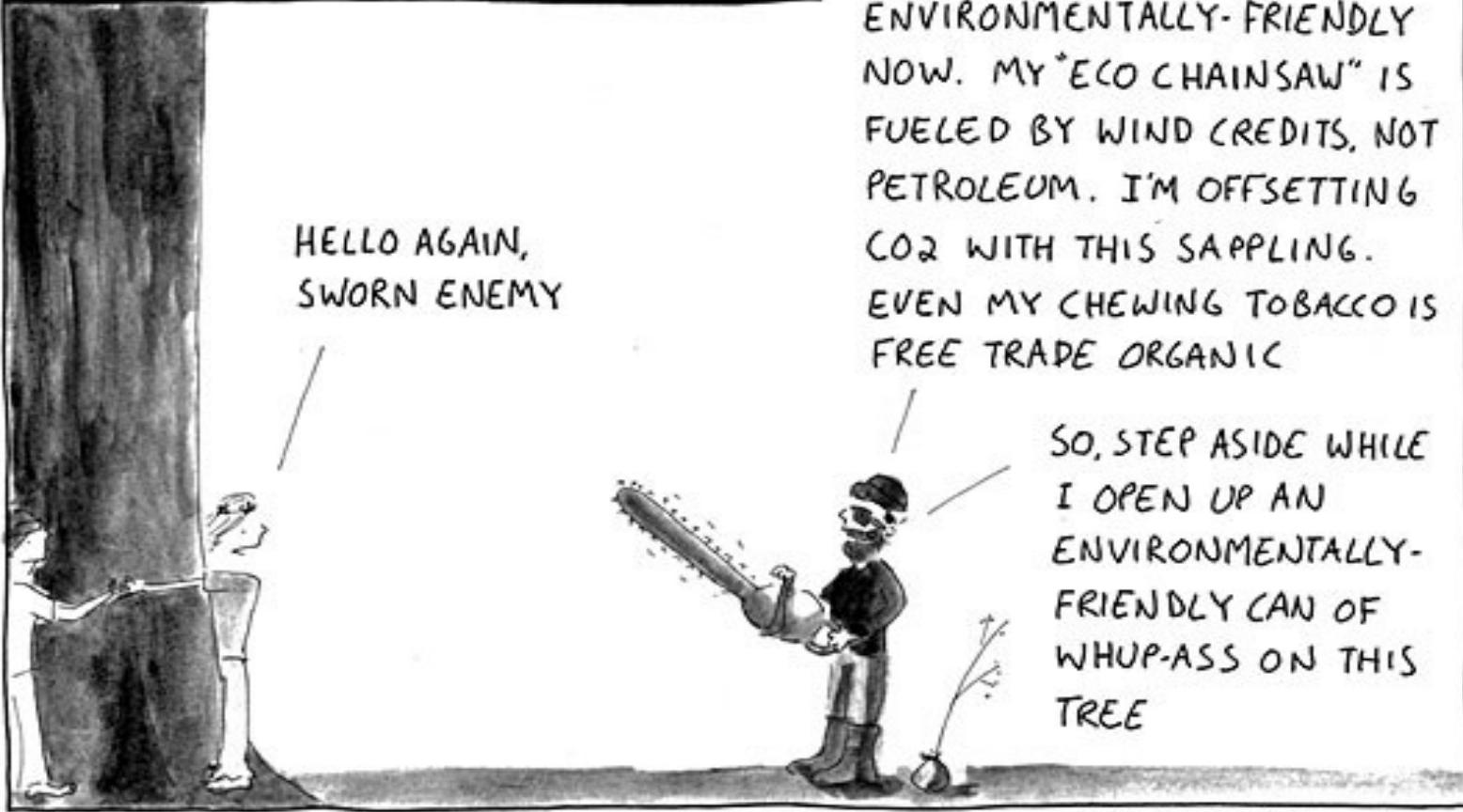
by Tom Fishburne

## THE ART OF GREENWASHING

HELLO AGAIN,  
SWORN ENEMY

AU CONTRAIRE, I'M  
ENVIRONMENTALLY-FRIENDLY  
NOW. MY "ECO CHAINSAW" IS  
FUELED BY WIND CREDITS, NOT  
PETROLEUM. I'M OFFSETTING  
CO<sub>2</sub> WITH THIS SAPPLING.  
EVEN MY CHEWING TOBACCO IS  
FREE TRADE ORGANIC

SO, STEP ASIDE WHILE  
I OPEN UP AN  
ENVIRONMENTALLY-  
FRIENDLY CAN OF  
WHUP-ASS ON THIS  
TREE



Welcome to Volkswagen

Volkswagen  
**TDICleanDiesel**  
Event

0.9% APR  
for  
60 M  
CleanDi



# Volkswagen Case

- Equipped 2.0 liter diesel vehicles with illegal software that detects when the car is being tested for compliance with EPA or California emissions standards and turns on full emissions controls only during that testing process
- Settlement has them paying \$10 billion to consumers
  - Either buyback faulty cars or modify emissions system
- \$4.7 billion to mitigate pollution
  - NOx emissions reduction program and tech investments

<https://www.youtube.com/watch?v=CQ4irwe3ZDk>



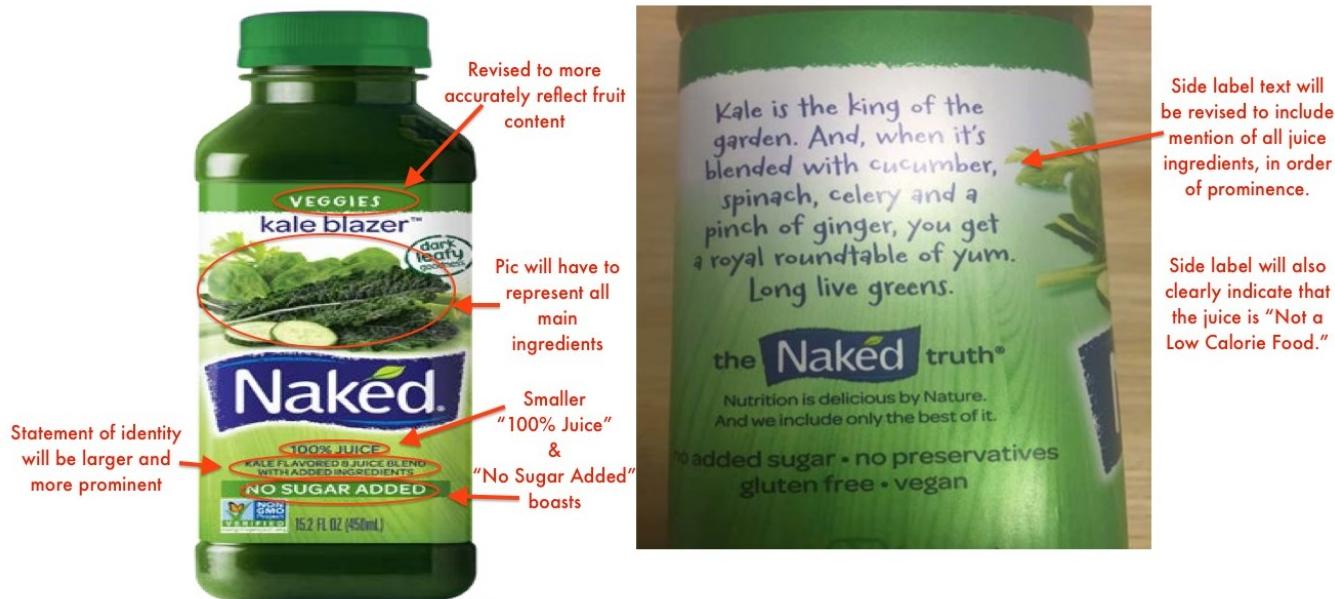
# Rayon Textiles Case

- Nordstrom, Bed Bath & Beyond, Backcountry.com, and J.C. Penney all paying fines
- Penalties total \$1.3 million
- Misleading to call bamboo that has been chemically processed into rayon simply ‘bamboo’
- All four companies had received warning letters in 201^



# Naked Juice

- ▶ One of the big concerns raised in the lawsuit was that Naked products like Kale Blazer, Sea Greens, Protein Zone, Green Machine, and many others touted their vegetable or non-fruit ingredients even though the primary juice in all of these products is apple and/or orange juice
  - ▶ “Although Kale Blazer is predominantly orange juice, it is not named ‘orange juice with kale and apple juice,’ or ‘orange juice with kale and apple flavors,’ nor does the label predominantly show oranges and apples,” explains the complaint.
- ▶ 2017: Dorcic revises label





Powerful cleaning done naturally

# Lawsuit Against Clorox Claims 'Green Works' Cleaners are Not 'Natural'

- ▶ The plaintiffs, New York and California residents, allege Clorox positioned the above products as naturally derived because "it knows consumers are more likely to purchase products bearing those labeling statements and pay a price premium for them."
- ▶ From a reasonable consumer's standpoint, the lawsuit argues, the advertising and labeling of the products is deceptive because they contain such synthetic, highly chemically processed ingredients as boric acid, calcium chloride, citric acid, and glycerin, among other components.

<https://richmanlawgroup.com/wp-content/uploads/2018/03/First-Amended-Complaint.pdf>

<https://www.leagle.com/decision/infco20180207900>



Commercial  
SOLUTIONS®

green  
works®

99% naturally derived  
**compostable\***  
cleaning wipes

toallitas limpiadoras compostables\*  
con el 99% de derivados naturales

62 WET WIPES  
7 x 15" (17.7 cm x 19.0 cm)

from the  
makers of  
Clorox®  
products



# Greenwashing Statistics

- ▶ Over 95% of retail products surveyed by TerraChoice committed at least of one of the TerraChoice “7 Sins of Greenwashing”
- ▶ 68% of people in the US think most companies overstate, or "greenwash," their environmental actions. Source Adecco USA Workplace (based on 2,281 adults)
- ▶ New study from UK and Netherlands Competition and Markets Authority shows that 40% of green claims made online could be misleading consumers.
- ▶ See examples of Greenwashing [HERE](#)

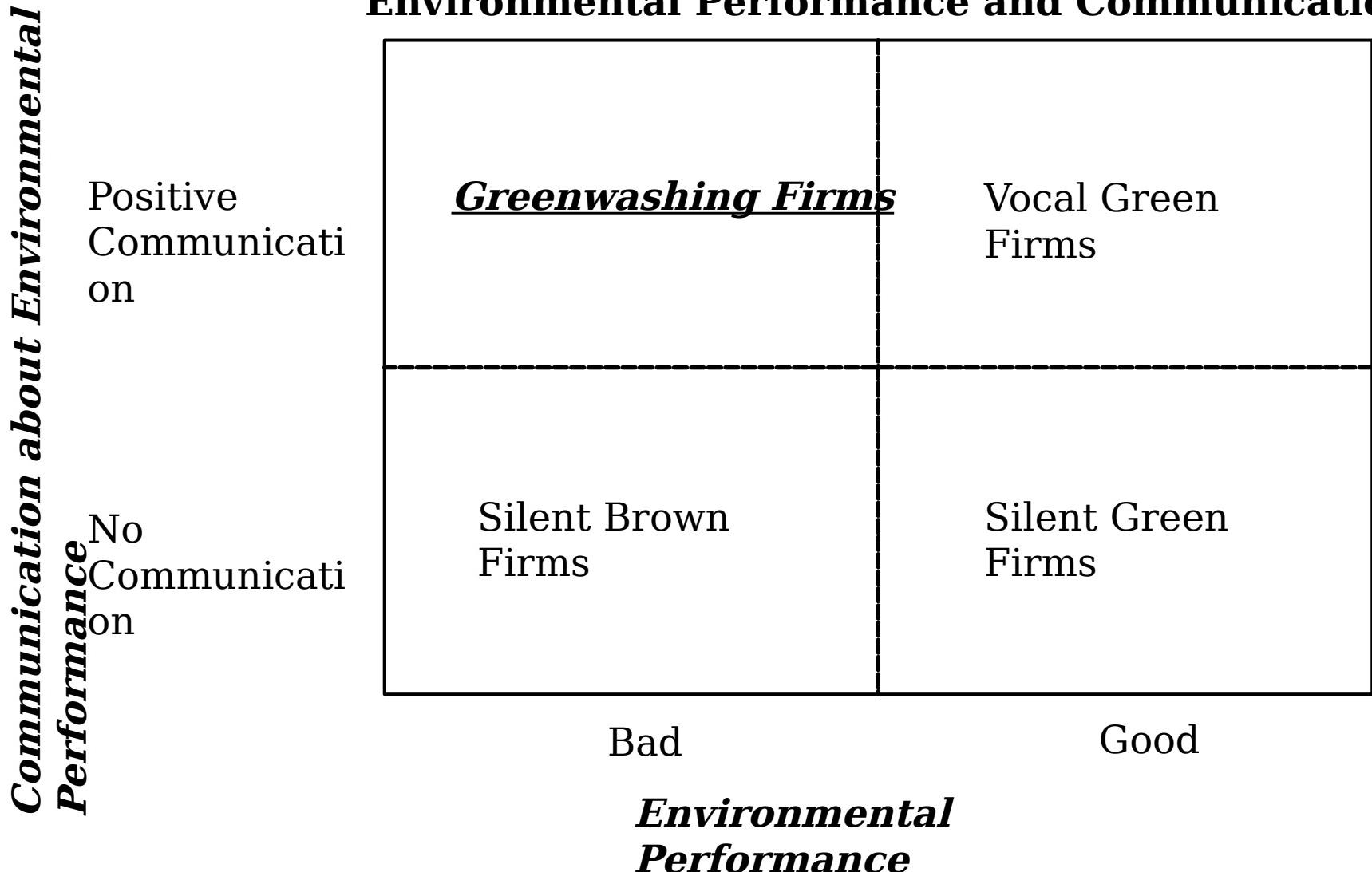
# What Exactly is Greenwashing?

## ► ***Definitions of greenwashing:***

- “Making false or misleading claims regarding environmentally friendly products, services or practices”
  - Lane, 2010 and Tolliver-Negro, 2009
- “The act of misleading consumers regarding the environmental practices of a company or the environmental benefits of a product or service”
  - TerraChoice Group, Inc.
  - Refers to both product and company level greenwashing
- Intentional? Unintentional?

# Greenwashing as a Combination of 2 Activities:

A Typology of Firms based on Environmental Performance and Communication



# Greenwashing Examples: Product Level

► ***Greenwashing can occur at the product level as well as at the company level***

## Product Level Greenwashing Examples:

- **Lululemon's** Vitasea product line, found not to contain seaweed as the product label claimed
- 10 of **LG Electronic's** refrigerator models which had received Energy Star certification listed erroneous energy usage measurements on their labels
  - Did not meet the efficiency standard required for certification



# Greenwashing Examples: Firm Level

- ▶ **General Electric's "Ecolmagination" campaign** highlights the work the company is doing in the environmental arena, but at the same time:
  - ▶ In 2000, GE went as far as the Supreme Court to fight the new clean air EPA requirements.
  - ▶ GE is still fighting an EPA-ordered clean up of the Hudson River where it dumped PCBs between 1940 to 1977.
- ▶ **BP's Beyond Petroleum Campaign**
  - ▶ Prior to the Gulf of Mexico oil spill, BP's less than green activities include:
    - Lobbying efforts to open restricted spaces such as the Arctic National Wildlife Refuge to drilling
    - Illegally dumping hazardous waste from the Endicott Island oil field between 1993 and 1995.
    - BP accounts for 2% of all global greenhouse gas emissions

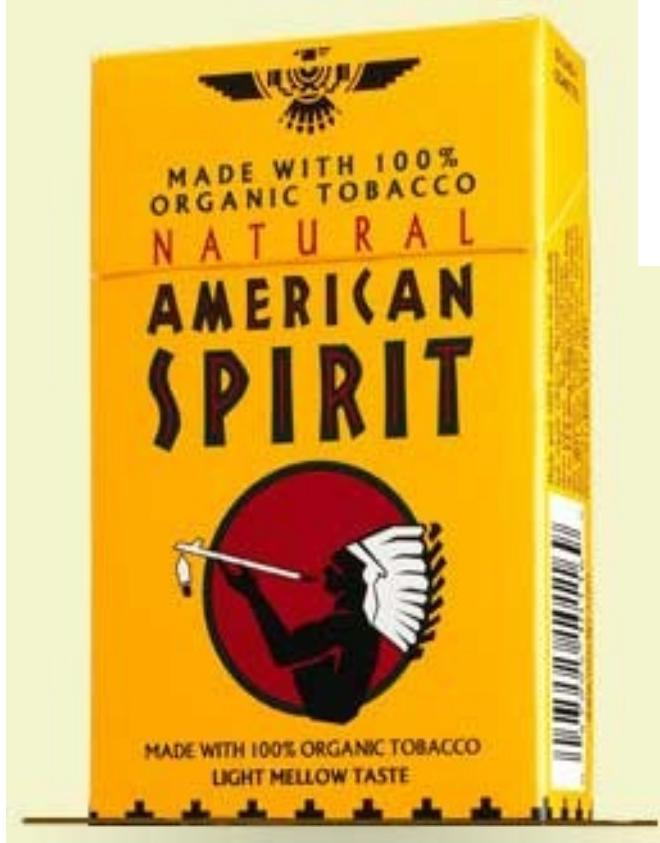


# Recognizing Product Level Greenwashing: TerraChoice 7 Sins of Greenwashing:

1. Sin of Hidden Tradeoff: 57%
  - What you say and what you don't say...unreasonable narrow set of attributes
  - Energy efficient office technology without attention to material content
2. Sin of No Proof: 25%
  - Cannot be substantiated by easily accessible information or third party
  - Toilet tissue claiming percentage of post-consumer recycled content
3. Sin of Worshipping False Labels: 23%
  - Gives the impression of third party certification but is not
  - Aluminum foil with certification-like images
4. Sin of Vagueness: 11%
  - Poorly defined claim
  - All natural: Arsenic, uranium, mercury, and formaldehyde are all naturally occurring, and poisonous.
5. Sin of Irrelevance: 4%
  - Environmental claim that is unimportant
  - Phosphate free for products that would not include phosphate anyway (fat free flour)
6. Sin of Lesser of Two Evils: 1%
  - Claim true within the product category but distract consumer from real env impact
  - Fuel efficient SUVs
7. Sin of Fibbing: <1%
  - False environmental claim

# Group Activity: Match the TerraChoice Sins with Product Examples

In your groups, identify the product that exhibits each TerraChoice Sin of Greenwashing (see handout)



CFC-Free 172L  
Refrigerator

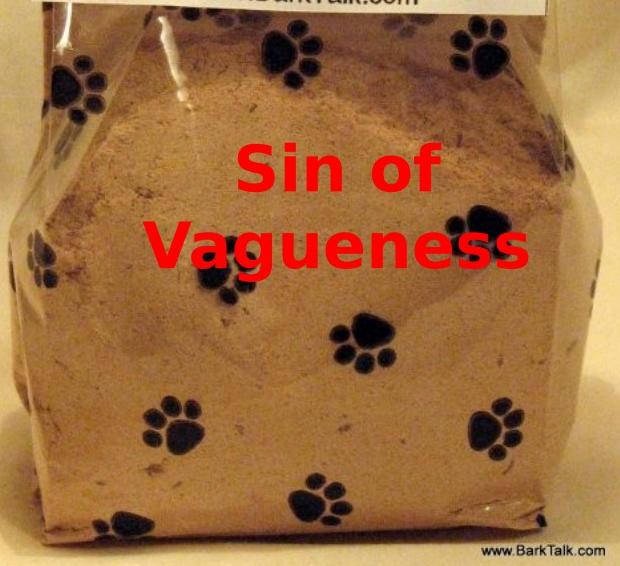


Tide Plant Based Clean

Windex®  
LG Electronic's  
Energy Star Certified  
Refrigerator



**BarkTalk**  
All-Natural  
Dog Cake Mix  
[www.BarkTalk.com](http://www.BarkTalk.com)



CFC-Free 172L  
Refrigerator



Sin of  
Irrelevance



Sin of  
Lesser of Two Evils



Sin of  
Worshipping  
False Labels



Windex®

LG Electronic's  
Energy Star Certified  
Refrigerator



Sin of  
Hidden tradeoff



# Sin of Vagueness



Although the company promises to use recycled paper content in the future for the tubeless TP they are verging on greenwash by labeling this as part of their *Scott Naturals* line, in which other products use 40% recycled paper.



In response to broadscale consumer demand, Tyson Foods is now producing all of its Tyson® brand fresh chicken from birds "Raised Without Antibiotics."

No petro-chemicals, no parabens, no ethoxylates, no PEG's, no Chinese materials, no animal derivatives, no artificial colors, no added fragrance, hypo-allergenic, Cruelty-Free.

Serenity does not contain Chinese progesterone found in other creams. Manufactured under the highest Standards of purity and good manufacturing practices. 100% hypo-allergenic. Purity and potency guaranteed by HPLC analysis. Exceptionally high quality moisturizer.



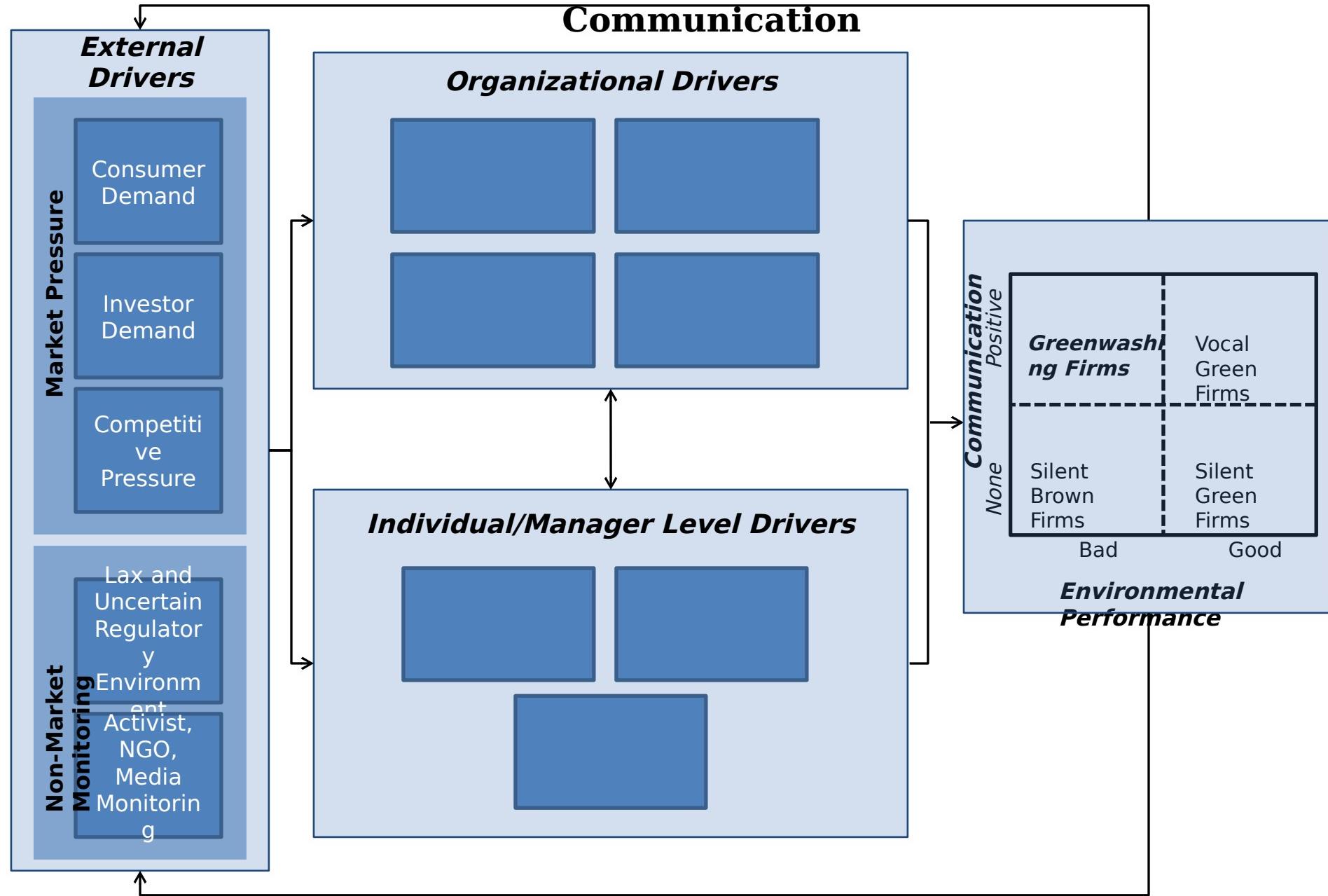
# Certified 100% Compostable Single-Serve Pods

"100% compostable" coffee pods took the guilt out of single serve.

But the capsules have only been certified by the Biodegradable Products Institute (BPI), an environmental advocacy group, to decompose at "industrial facilities" and not in the compost pile in your backyard.

What are the organizational  
and individual drivers of  
greenwashing?

# Drivers of Firm Environmental Performance and Communication



# Regulatory Environment: Federal

- ▶ *Product or service advertising regulation:*
  - ▶ The US Federal Trade Commission (FTC) is empowered to apply Section 5 of the FTC Act to environmental marketing claims
    - Prohibits unfair or deceptive acts or practices
  - ▶ If the FTC finds that an advertiser violated Section 5 it can:
    - Issue a cease and desist order to the violator
    - Issue the violator a fine of up to \$10,000 if the violator does not stop the practice
    - Establish criminal liability if the violation is committed with the intent to defraud or mislead.
  - ▶ The PR damage to a firm or consumer litigation suits it may spur may be more substantial than potential FTC penalties.

# Regulatory Environment: Federal

*The FTC has conducted some investigations related to false green advertising, but limited in number:*

- ~100 environmental cases since 1992
  - See <https://www.ftc.gov/enforcement/cases-proceedings/advanced-search>
  - Example: <https://www.ftc.gov/news-events/press-releases/2019/09/truly-organic-ftc-says-no-alleges-retailer-misled-consumers-about>
- Examples of Recent Charges:
  - 2019: Truly Organic
  - 2019: The [FTC sued Lights of America Inc., Usman Vakil, and Farooq Vakil](#) for violating federal law by overstating the light output and life expectancy of their LED bulbs, and falsely comparing the brightness of their LED bulbs with that of other light bulbs.
  - 2018 4 paint manufacturers about No Voc paint
  - 2017: Volkswagen settles for cheating emission tests

# Product Level Greenwashing as the Cause of False Advertising Lawsuits

*Product level greenwashing can result in false advertising lawsuits  
(sometimes resulting from competitor's inquiry into claims)*

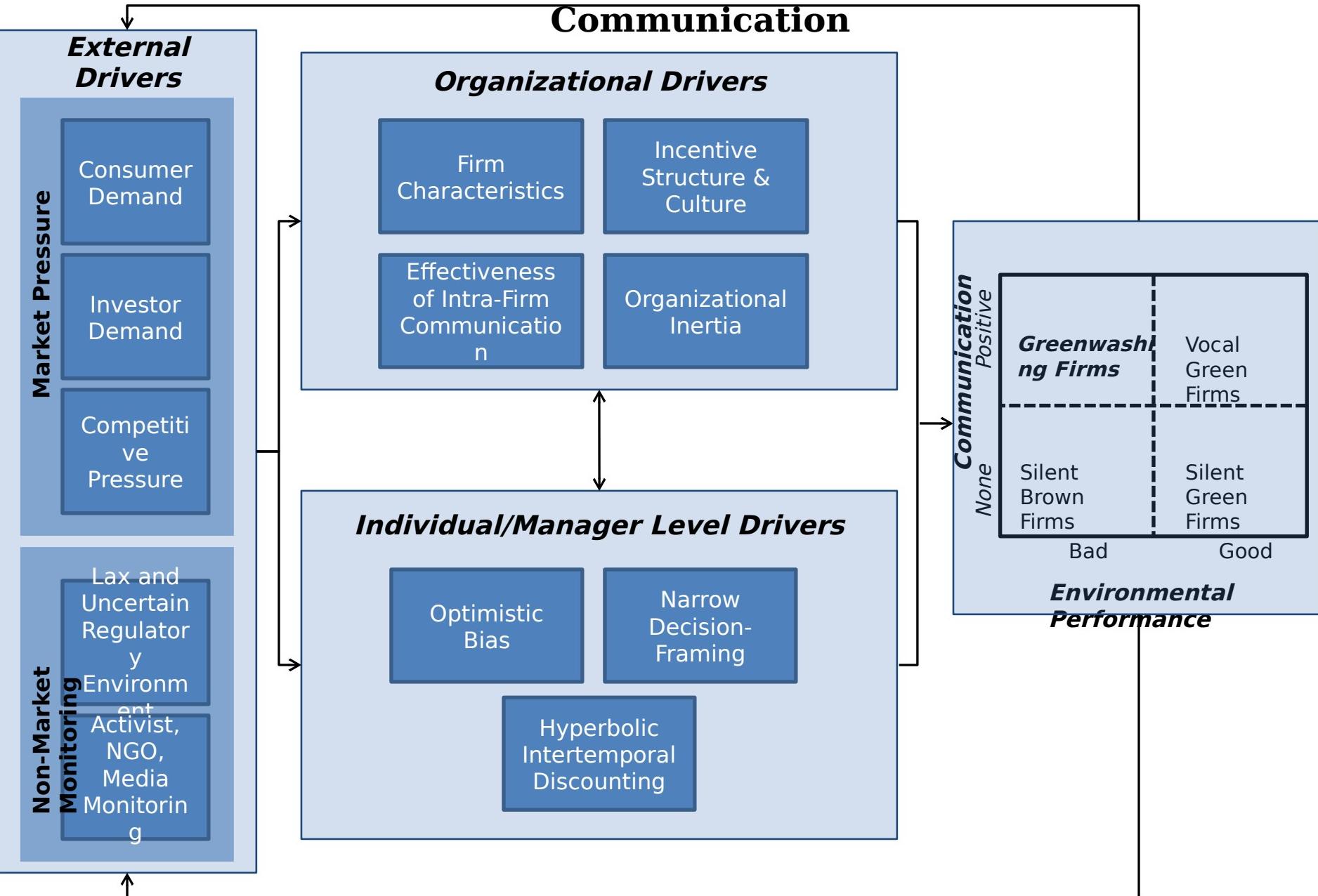
- Class action suit against S.C. Johnson & Son alleging that placing a proprietary "Greenlist" seal on its Windex window cleaning products misled consumers into believing that the products were independently certified by a third party while the Greenlist was actually an S.C. Johnson-conceived program.
  - As part of the settlement, SC Johnson said it agreed not to use its current "Greenlist" logo on Windex products for one year.
- Class action against PepsiCo for health claims of Naked Juice products.



As part of a \$9 million settlement in 2013, the company agreed to stop calling them "all natural."

Consumer advocacy group the [Center for Science in the Public Interest](#) (CSPI) claims that statements like "no sugar added" and "only the best ingredients" lead customers to believe that

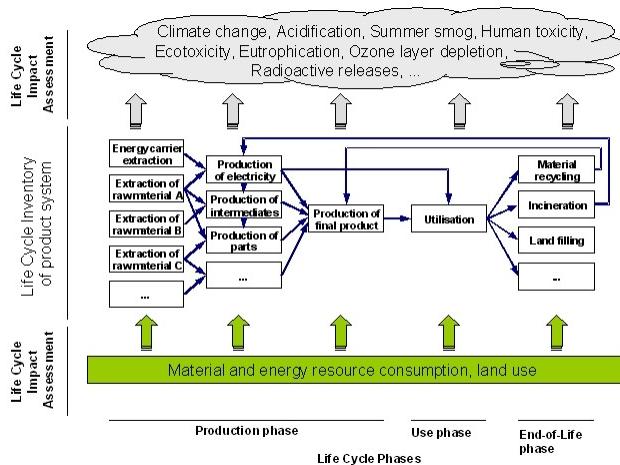
# Drivers of Firm Environmental Performance and Communication



# Why does greenwashing happen? Is greenwashing always intentional?

- Managers cashing on the **ambiguity** surrounding how one defines a green product to sell more products
- Managers using the **ambiguity** of regulation
- Managers who have a poor understanding of green products and who genuinely believe that their products are green

**Measure complex environmental performance**



**Simple marketing signal**

**Lost in translation?**



# FIJI Water: The world's first carbon negative bottled water offsets 120% of emissions

- ▶ "Defendants' carbon-negative claim is deceptive and misleading ... reasonable consumers of FIJI water understand Defendants' 'carbon-negative' claim as meaning that FIJI water's current operations remove more carbon from the atmosphere than they release into it," the lawsuit states. "This is simply not the case; in reality, FIJI water's operations do not remove more carbon from the atmosphere than they release into it. Instead, they use a discredited carbon accounting method called 'forward crediting.'



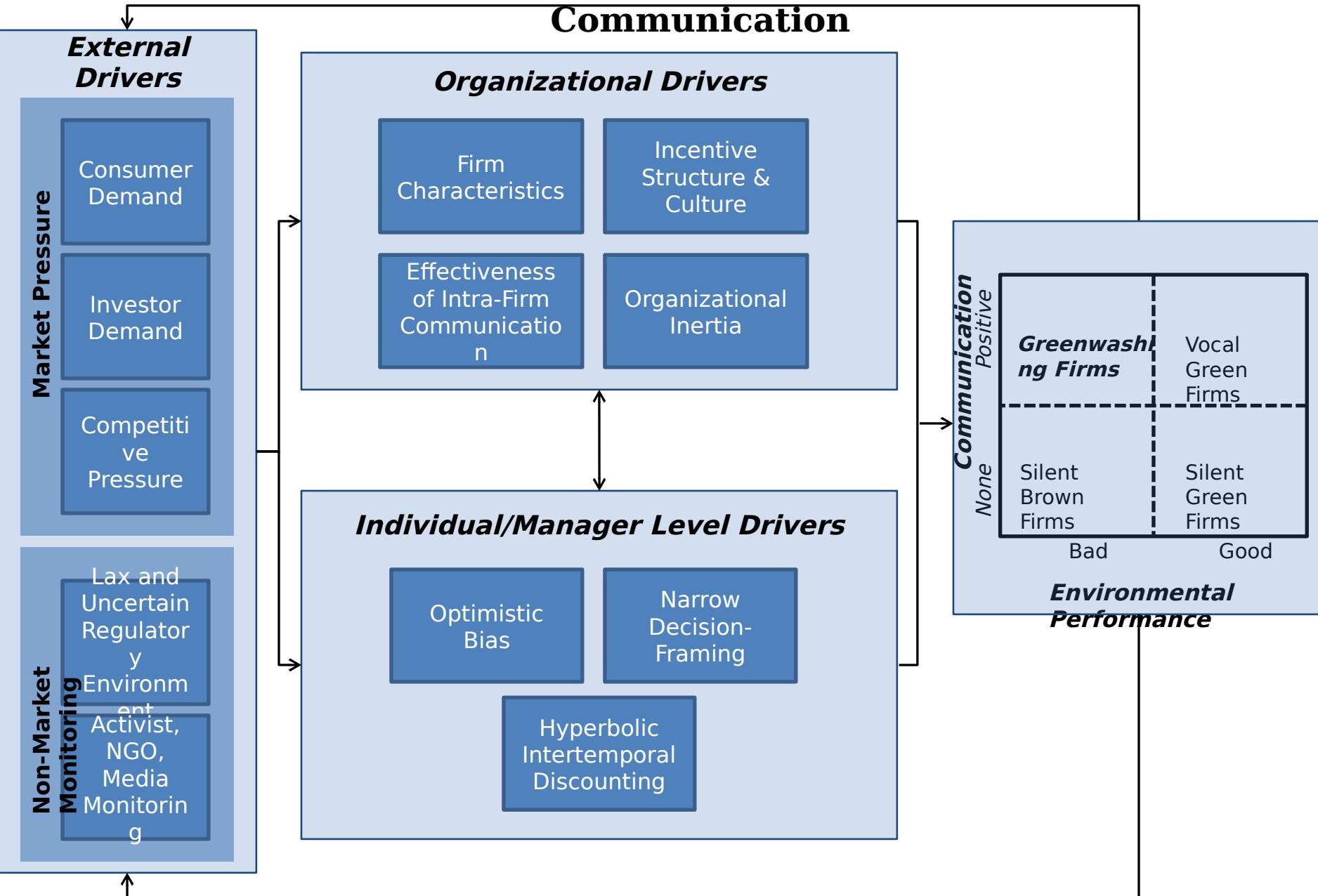
# Drivers of Greenwashing: Organizational

- **Effectiveness of intra-firm and supply chain communications**
  - E.g., lack of effective communication between product development or packaging with a marketing or PR department, or lack of effective communication with suppliers (Lululemon)
- **Organizational inertia**
  - Changing structural forms and procedures that underlie strategy is time consuming, difficult, costly and risky (Lululemon, Body Shop).
- **Incentives and culture**
  - Perverse incentives can lead to unethical behavior (e.g., Eastern Airlines)
  - Aggressive culture of earnings growth can be an obstacle to ethical behavior (e.g., Enron)
- **Firm characteristics**
  - Characteristics such as the industry in which a firm competes, its size, profitability, lifecycle stage, particular resources and competencies influence costs and benefits associated with greenwashing (interaction effect)

# Drivers of Greenwashing: Individual

- **Narrow Decision Framing:** making decisions in isolation, not based on the “big picture”
  - E.g., statistical fact that consumption does not adjust downward when people lose their job
  - Green marketing person might not be aware of other departments environmental impacts
- **Hyperbolic Intertemporal Discounting**
  - People exhibit high discount rates (impatient) over short horizons and low discount rates (patient) over long horizons, generating preference reversals
  - E.g., consumers may not achieve their desired level of “target savings” b/c short **run preferences for instantaneous gratification** undermine efforts to implement patient long run plans
  - Decision maker may chose to communicate about environmental sustainability with an intention to bear costs to implement this in the future, but when the future becomes today, decision-maker acts impatiently again and chooses to greenwash
- **Optimistic Bias:** tendency to over-estimate the likelihood of positive events and under-estimate likelihood of negative events
  - E.g., survey of new entrepreneurs
  - Decision maker may overestimate likelihood of positive results of greenwashing and underestimate likelihood of negative events

# Drivers of Firm Environmental Performance and Communication



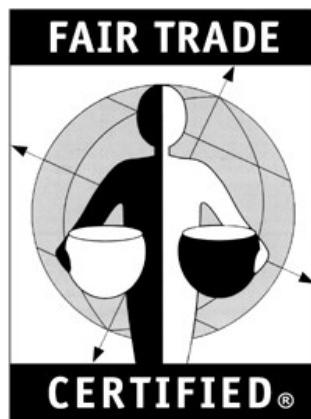
# Implications for Managers: How to Avoid Company Level Greenwashing

- Increase TRANSPARENCY throughout organization
- Increase internal collaboration regarding environmental communication
  - e.g., create a sustainability department or officer to oversee environmental practices and environmental communication of the company
  - Include sustainability professionals and legal advisers to sign off on advertising campaigns
  - The substance of a green claim should be checked both internally with CSR or sustainability experts and externally
- Change the organizational culture
  - Align employee incentives
  - Provide ethical and greenwashing training for employees
  - Be cognizant of psychological tendencies when assessing costs and benefits of marketing products, practices, or a company as green or environmentally friendly
- Work with external stakeholders
  - Collaborate with industry, government and NGOs
  - **Use third party objective endorsements or a recognized and respected eco-label**

# Eco-labels for Green Products

# Eco-labels for green products

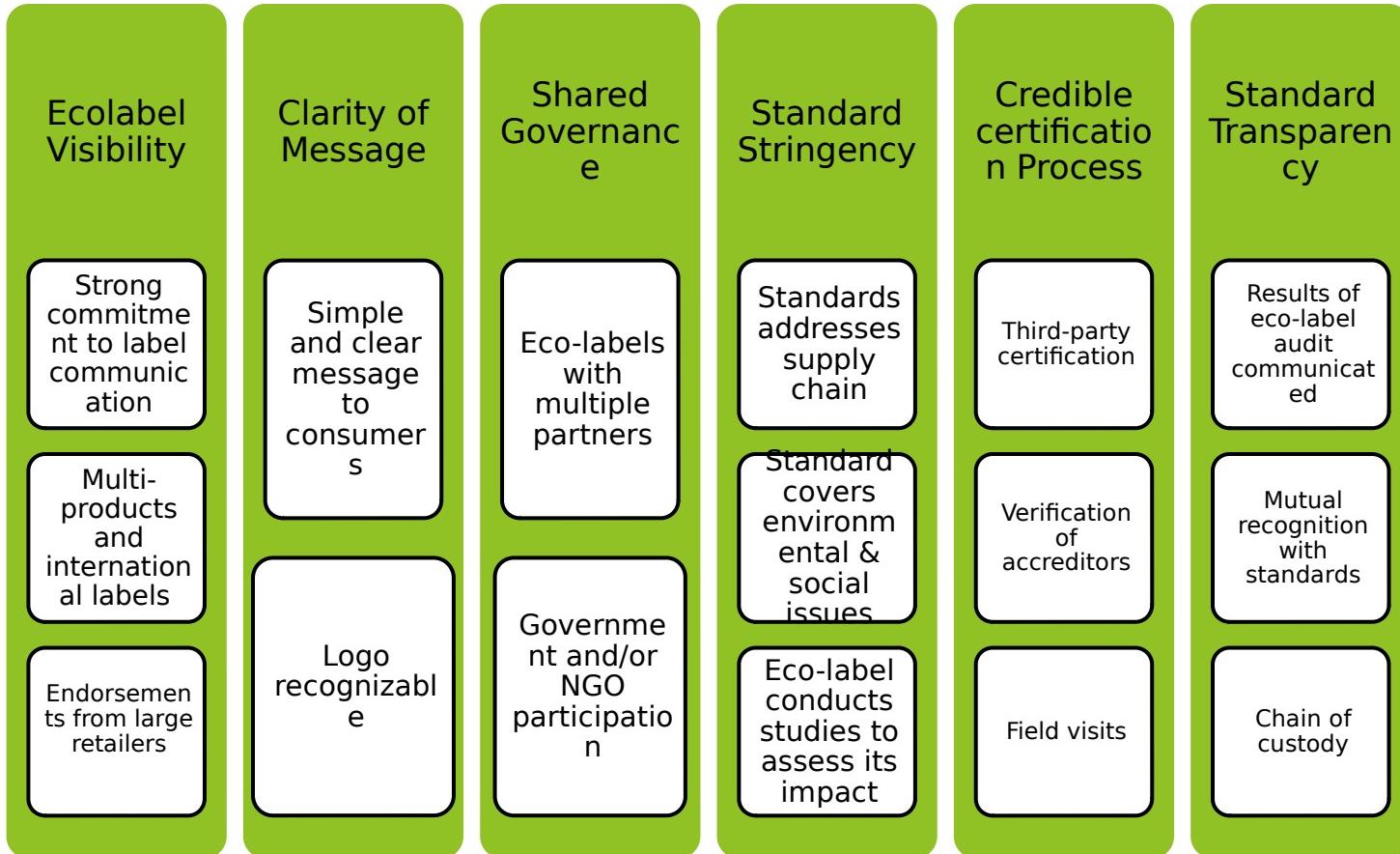
- ▶ Goal
  - ▶ to provide consumers with accurate information regarding the environmental qualities of products and, by doing so, introduce a competitive dynamic in the market place (Salzman)
- ▶ Mechanism
  - ▶ Reduce information asymmetry between producer and consumer regarding the environmental attributes of a product
  - ▶ Customers pay a **price premium** that allows producers to invest in **costlier** environmental management practices
- ▶ When should firms use eco-labels as a communication tool?



# Success of Eco-labels?

- ▶ Theory is the same for all eco-label schemes but some are thriving while other are not. Success is in the details...
- ▶ Factors that lead to successful Eco-labels include
  - ▶ **consumer awareness** (labeled products need to be available),
  - ▶ **consumer acceptance** (credibility/comprehension),
  - ▶ **and consumer behavior change** (willingness to pay...)
- ▶ Successful eco-labels are able to influence BOTH the supply chain as well as elicit market response

# Eco-label Awareness, Understanding and Confidence



ESTABLISHED BY EPA IN  
1992

(RUN BY EPA AND U.S.DOE)

CLEAN AIR ACT  
2005 ENERGY POLICY ACT

IDENTIFY ENERGY  
EFFICIENT PRODUCTS

(BEGAN WITH COMPUTERS AND PRINTERS)



## 1 Specification Development

Systematic process that prioritizes transparency, inclusiveness, and consistency.

## 2 Test Procedure Development

Fair, repeatable testing of products seeking ENERGY STAR certification.

## 3 Third Party Testing

Tested in an EPA-recognized laboratory and reviewed by an EPA-recognized certification body before they can carry the label.

## 4 ENERGY STAR® Label Reception



## 5 Post-Market Verification

ENERGY STAR certified products are subject to post-market verification

## 6 Specifications Revisions

Specifications are then revised periodically to ensure relevancy under current market conditions

# PROCESS

Dept of Energy

EPA

ENERGY STAR  
HOMES ARE  
**10%**  
MORE  
EFFICIENT



90%  
OF AMERICAN  
HOUSEHOLDS  
RECOGNIZE  
LOGO



**SAVED**  
4  
TRILLION  
KW-H OF  
ENERGY



**SAVED**  
\$30  
BILLION IN  
ENERGY  
COSTS  
(2017 alone)



**REDUCE**  
D  
3 BILLION  
TONS OF  
GREENHOUS  
E GAS  
EMISSIONS  
~600 mil cars



**IMPACT**

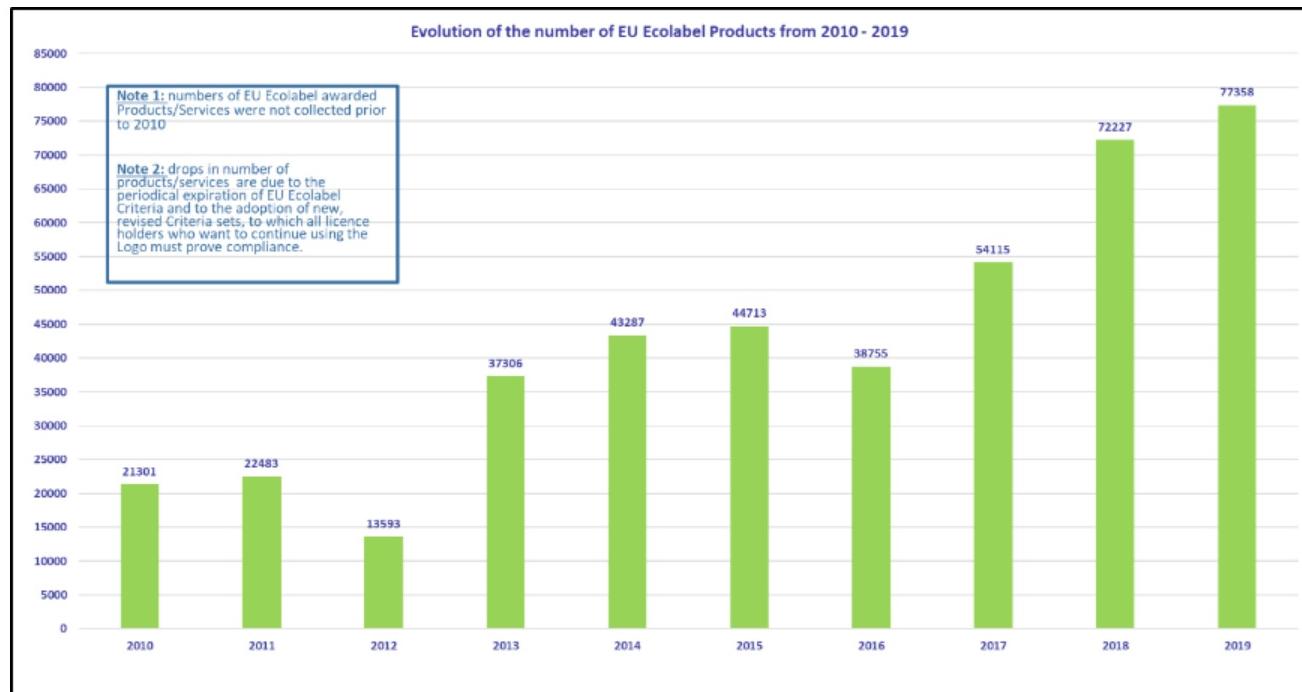


# European Eco-label

# Environmental criteria



- ▶ Life cycle analysis
- ▶ Various environmental impacts included
  - ▶ air, water, soil, waste, energy, natural resource management, global warming, ozone layer protection, environmental safety, noise, biodiversity





## Check-list (for a first assessment only)

# Criteria for compute

## Efficient power supply requirements

## Power Management

	<p><b>Internal power supplies:</b> 80% minimum efficiency at 20%, 50%, and 100% of rated output and minimum Power Factor 0.9 OR</p> <p><b>External power supplies:</b> either ENERGY STAR qualified or meet the no-load and active mode efficiency levels provided in the ENERGY STAR External Power Supply (EPS) specification</p>
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Life Cycle Step	Criterion	Expectations
Manufacturing	Limitation of the use of substances harmful to the environment and health	<ul style="list-style-type: none"> <li>Plastic parts heavier than 25g shall not contain flame retardant substances or preparations that are assigned any of the following risk phrases: R45, R46, R60, R61, R50, R50/53, R51/53 as defined in Council Directive 67/548/EEC and its amendments.</li> <li>Plastic parts shall not contain PBB or PBDE flame retardants, nor chloroparaffin flame retardants with chain length 10-17 carbon atoms and chlorine content &gt;50% by weight.</li> <li>The background lighting of the LCD monitor shall not contain more than 3mg of mercury on average per lamp.</li> <li>Batteries shall not contain more than 0,0001% of mercury, 0,001% of cadmium or 0,01% of lead by weight of the battery.</li> </ul>
Use	Energy saving	<ul style="list-style-type: none"> <li>System unit: <ul style="list-style-type: none"> <li>The computer system unit shall meet the Energy Star configuration requirements.</li> <li>The computer shall support the ACPI S3 sleep state (suspend to RAM) ≤ 4W.</li> <li>The default mode-change time from operation to the ACPI S3 sleep state ≤ 30 minutes.</li> <li>The portable computer shall have an off-mode consumption ≤ 2W.</li> </ul> </li> <li>The monitor shall: <ul style="list-style-type: none"> <li>have a sleep mode power consumption ≤ 2W.</li> <li>have a default mode-change time from operation to the sleep state ≤ 30 minutes.</li> <li>have an off-mode consumption ≤ 1W.</li> <li>not exceed the Energy Star Version 4 requirements for Tier 2, maximum active power consumption linked to the number of mega-pixels.</li> </ul> </li> </ul>
Use	User instructions for environmental use	<p>The following information shall come with the product:</p> <ul style="list-style-type: none"> <li>Use of the power management features: disabling of features can increase energy consumption.</li> <li>Zero energy consumption if the power supply is unplugged or if the wall socket is switched off.</li> <li>Availability of spare parts.</li> <li>The parts of the portable computer are designed to be recycled or reused.</li> <li>Appropriate use of WLAN (WIFI) cards to minimize security risks.</li> </ul>
Use	Reduction of noise	<ul style="list-style-type: none"> <li>Noise ≤ 40 dB(A) in idle operating mode.</li> <li>Noise ≤ 45 dB(A) when accessing a hard-disk drive.</li> </ul>
Use	Limited electromagnetic emission	<ul style="list-style-type: none"> <li>The portable computer shall meet the requirements as set out in EN50279, Category A.</li> </ul>
End of life	Reduction of ecological damage related to the use of natural resources by encouraging product upgrading and recycling	<ul style="list-style-type: none"> <li>Easy dismantling and disassembling by one qualified person alone.</li> <li>90% by weight of plastic and metal materials recyclable.</li> <li>Plastic parts shall have no added lead or cadmium, nor metal inlays that cannot be separated easily, be of one polymer or compatible polymers (except for the cover), and have a permanent marking identifying the material in conformity with ISO 11469:2000 standard.</li> <li>Hazardous material shall be separable.</li> <li>Labels shall be easily separable or inherent.</li> </ul>
End of life	Limitation of solid waste	<ul style="list-style-type: none"> <li>Free of charge take-back for refurbishment or recycling of the product and for any component being replaced, except for items contaminated by the user.</li> <li>Information on take-back policy.</li> <li>All packaging components shall be easily separable by hand into individual materials to facilitate recycling.</li> <li>Cardboard packaging shall consist of at least 80% recycled material.</li> </ul>
End of life	Durability	<ul style="list-style-type: none"> <li>The computer shall be designed so that the memory and the graphic cards are easily accessible and can be changed.</li> <li>The computer shall be designed so that the hard disk, and either the CD drive or DVD drive can be changed.</li> </ul>

# Criteria for refrigerators

Full Size- 7.75 + cubic feet	At least 15% more energy efficient than the minimum federal government standard (NAECA).
Compact Size- Less than 7.75 cubic feet & 36" in height	At least 20% more energy efficient than the minimum federal government standard (NAECA).

Life Cycle Step	Criterion	Expectations
Manufacturing	Limitation of the use of substances harmful to the environment and health	<ul style="list-style-type: none"> <li>Plastic parts heavier than 25 g shall not contain flame retardant substances or preparations that are assigned any of the following risk phrases: R45, R46, R60, R61, R50, R50/53, R51/53 as defined in Council Directive 67/548/EEC and its amendments.</li> <li>Plastic parts shall not contain PBB or PBDE flame retardants, nor chloroparaffin flame retardants with chain length 10-13 carbon atoms and chlorine content &gt;50% by weight.</li> </ul>
Use	Energy saving	<ul style="list-style-type: none"> <li>The appliance must have an energy efficiency class of A+ or A++ as defined in Directive 94/2/EC, and amended by Directive 2003/66/EC.</li> </ul>
Use	Reduction of noise	<ul style="list-style-type: none"> <li>Noise ≤ 40dB(A).</li> <li>Information about the noise level of the appliance provided in a clearly visible way to the consumer.</li> </ul>
Use	User instructions for environmental use	<p>The following information shall come with the product:</p> <ul style="list-style-type: none"> <li>Guidelines on optimal installation of the appliance.</li> <li>The consumer should avoid placing the appliance next to any heat source or in direct sunlight.</li> <li>Thermostat setting dependant on the ambient temperature.</li> <li>Hot foodstuffs shall be allowed to cool down before placing in the appliance.</li> <li>Evaporator unit should be kept clean from thick ice layers and frequently defrosted.</li> <li>Door seal to be replaced when deficient.</li> <li>When moving the appliance, sufficient time should be allowed before switching it on again.</li> <li>Condenser and appliance to be kept clean.</li> <li>Information that ignoring the above-mentioned instructions will lead to higher energy consumption.</li> <li>Damage to the condenser (with sharp objects) to be avoided because of environmental and health risks.</li> <li>Presence of fluids and materials that are reusable and/or recyclable.</li> </ul>
End of life	Eco-design to facilitate recycling	<ul style="list-style-type: none"> <li>Easy disassembly of the machine taken into account in the design.</li> <li>A disassembly report shall be provided.</li> <li>Plastic parts heavier than 50 g: permanent marking identifying the material, in conformity with ISO 11469 standard.</li> <li>Clear indication of the type of refrigerant and foaming agent used in order to facilitate the recovery.</li> </ul>
End of life	Reduction of ecological damage related to substances with ODP and GWP	<p>Refrigerants and foaming agents:</p> <ul style="list-style-type: none"> <li>Ozone Depletion Potential (ODP) = 0.</li> <li>Global Warming Potential (GWP) ≤ 15 (CO<sub>2</sub> equivalent on 100 years).</li> </ul>
End of life	Reduction of solid waste	<ul style="list-style-type: none"> <li>Take-back for recycling free of charge.</li> <li>Information on take-back policy.</li> <li>All packaging components shall be easily separable by hand into individual materials to facilitate recycling.</li> <li>Cardboard packaging shall consist of at least 80% recycled material.</li> </ul>
End of life	Durability	<ul style="list-style-type: none"> <li>Lifetime extension: the availability of compatible replacement parts and service shall be guaranteed for 12 years from the time that production ceases.</li> </ul>

# EUROPEAN UNION ECO-LABEL



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GUARANTEE PRODUCTS OF LOWER ENVIRONMENTAL IMPACT

## COMPARISON OF ELECTRONICS CRITERIA

★  
**Higher Energy Efficiency**

★  
**Delivers Features Consumers Demand**

★  
**Reasonably Recover Cost of Investment**

leaf icon  
**Lower Energy Use**

leaf icon  
**Limited Harmful Chemicals**

leaf icon  
**Higher Durability**

leaf icon  
**Easier Disassembly & Recycling**

## METHOD

24 product groups

Life Cycle approach

# Energy Star vs EU Ecolabel

	<b>Consumer awareness (recognition/availability)</b>	<b>Consumer acceptance (credibility / Comprehension)</b>	<b>Consumer behavior change (willingness to pay)</b>
Energy Star	++ strong marketing campaign	++/++ Single environmental impact	+ use govt purchasing power
European	--	++/--	-

# LABEL REPORT CARD

<http://www.ecolabelindex.com/>



**How meaningful is the label?**

**Is the label verified?**

Is the meaning of the label consistent?

Are the label standards publicly available?

Is information about the organization publicly available?

Is the organization free from conflict of interest?

Was the label developed with broad public and industry input?

**Highly for food  
Not for cosmetics**

**Yes**

**Yes**

**Yes**

**Yes**

**Yes**

**Yes**

# Principles of message simplification

## Parsimony

- Aggregate environmental impacts
- Break the numbers into more easily understood categories

## Comparability

- Use one scale for different impacts
- Re-scale individual impacts for better evaluability

## Contextualization

- Use analogies
- Provide more easily understood measures

## Translation

- Translate metrics into simpler ones
- Translate metrics into something people care more about

## **Increase consumer awareness & understanding**

Favor simple and clear message to consumers

Choose eco-labels with strong commitment to label communication

Prefer multi-product labels

- Number of product categories related to eco-label

- Number of countries where eco-label can be found

Favor labels with strong endorsements from large retailers

## **Gain consumer confidence**

Check credibility of eco-label organization and partners

- Government and/or NGO participation

Favor eco-label organization with multiple partners

- Number of stakeholders involved during the standard setting process

Ensure credible certification process

- Use established standards to develop eco-label

- Third party certification

- Verification of accreditors

- Field visits

Prefer more stringent standards

- Standard addresses supply chain

- Standard covers both environmental and social issues

- Eco-label conducts studies to assess its impact

Choose transparent eco-label organizations

- Results of eco-label audit communicated

- Mutual recognition with standards

- Chain of custody

## **Stimulate willingness to pay**

Ensure increased quality

Ensure health benefits

Leverage peer pressure

# Conclusion

- ▶ Eco-labels that are
  - ▶ Credible,
  - ▶ Diffused broadly
  - ▶ Easily understood
  - ▶ That provide private benefits to the consumers
- ▶ are more likely to command a price premium than eco-labels that do not fulfill these requirements.
- ▶ Firms should favor adopting such eco-labels

# Sustainable Information Strategies

## Consumer Awareness, Understanding & Confidence

- Leadership dedication
- Tangible environmental impacts
- Genuine communication throughout the organization
- Supplier engagement
- Credible third party eco-certification

## Consumer Willingness to Pay

- Private benefits:
  - Quality
  - Health
  - Status
  - Money
  - Emotion

